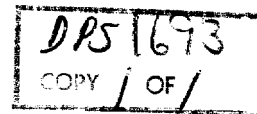
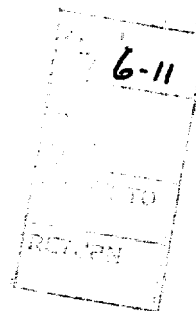


5 June 1958



Perkin-Elmer Corporation  
P.O. Box 879  
Norwalk, Conn.

STATOTHR

Attention:

**Subject:** Proposal for a Special Product Improvement Program,  
Configuration 73-C

**Reference:** Conference 23 May 1958, Dayton, Ohio

**Dear Sir:**

Pursuant to agreements reached at the conference in Dayton, we are pleased to submit herewith a formal proposal to accomplish a special product improvement program on one (1) 73-C Configuration. This proposal consists of the following exhibits:

- Exhibit "A" - Statement of Work
- Exhibit "B" - Technical Description
- Exhibit "C" - Estimated Price Summary
- Exhibit "D" - Government Furnished Property
- Exhibit "E" - Terms and Conditions

Contractor understands that during the performance of any work contemplated by this proposal, Perkin-Elmer Corporation retains primary systems responsibility for the 73-C Configuration system. Contractor further understands that prior to the initiation of any work not presently stated in the Technical Description (Exhibit "B") additional or supplementary technical descriptions will be submitted to and approved by Perkin-Elmer Corporation.

Contractor understands that the Perkin-Elmer Corporation will:

- a. Remount the primary mirror.
- b. Stiffen the "G" mirror mount.
- c. Assembly and test a set of optics in the optical structure.
- d. Furnish the assembled optics and optical structure to the Contractor.
- e. Be responsible at Contractor's facility for the optical test portion of the complete systems test.
- f. Maintain technical cognizance of the complete system test and flight test of the 73-C Configuration.

Contractor further understands that the Perkin-Elmer Corporation is conducting additional studies in the following areas:

- a. Aircraft isolation
- b. Stiffening of plastic cover
- c. Use of mechanical dampers for the H, I, and primary mirrors.

These additional study areas may result in additional design changes to be recommended by the Perkin-Elmer Corporation.

The following items of Contractor owned test equipment on loan to the Perkin-Elmer Corporation are to be returned to Contractor on or before 16 June 1958.

- a. One (1) HG-735331-101 Model 513 Techtronix oscilloscope
- b. One (1) Type 53-C Techtronix Preamplifier #11511
- c. Two (2) Bruel & Kjaer type 4308 accelerometers
- d. One (1) Bruel & Kjaer type 1606 Preamplifier
- e. Two (2) Hycon Integrating Amplifiers

Contractor contemplates an initial flight test will be accomplished on or about 17 July 1958. All services will be complete on or about 31 July 1958.

Subcontractor represents (a) that he has not employed or retained any company or person (other than a full-time bona fide employee working solely for the Contractor) to solicit or secure this contract and (b) that he has not paid or agreed to pay any company or person (other than a full-time bona fide employee working solely for the Contractor) any fee, commission, percentage or brokerage fee contingent upon or resulting from the award of this contract, and agrees to furnish information relating thereto as requested by the Contracting Officer.

The prices set forth in this proposal reflect the subcontractor's best estimate of cost to perform the scope of work herein stated for the period 23 May 1958 through about 31 July 1958. All other data including the terms and conditions may be considered as the basis for negotiation with the Hycon Mfg. Company of a Cost-Plus-Fixed-Fee type contract.

Very truly yours,

HYCON MFG. COMPANY

[Redacted Signature]

STATOTHR

Vice President, Engineering

BJW/bjs

enclosure

Exhibits A, B, C, D, and E

Exhibit "A"

**STATEMENT OF WORK**

Encl #1  
0PS/693  
COPY 1 OF 1

The Contractor shall supply the necessary qualified personnel, facilities and material, and shall use its best efforts to perform a product improvement program on the 73-C Configuration. These services shall include but not necessarily be limited to the following:

- a. Engineering studies, designs, fabrication and assembly of parts, components, and assemblies, and ground and flight tests as outlined in the technical description (Exhibit "B").
- b. Engineering conferences at the Contractor's plant or such other locations as may be designated by Perkin-Elmer Corporation.

Exhibit "B"

## TECHNICAL DESCRIPTION

Encl # 2  
DPS/693  
COPY 1 OF 1

The following technical description of the work to be performed by Hycon was defined in a conference of technical personnel from Hycon and PECO, and apply to one (1) configuration only. Unless otherwise noted, this work will be performed at Hycon's Pasadena, California plant and at a Test Site.

1. 300" Collimators. Hycon will provide technical assistance to PECO in the alignment of two (2) 300" Collimators; one at Hycon, one at the Test Site. This assistance will include transportation of the collimators between Pasadena and the Test Site.
2. Test Stand. One (1) heavy test stand, similar to that at PECO, will be designed and manufactured by Hycon. This stand will be sturdy enough to support the existing stabilizer test stand and configuration, and is intended to be used for final optical alignment of the configuration.
3. Rubber Isolators. The existing rubber isolators between the three major configuration structures, and between sub-assemblies, motors, etc., and their supporting structures will be removed.
4. Dynamic Balance of Motor Armatures. To further reduce internal sources of vibration, the armatures of the electric motors in the configuration will be dynamically balanced prior to systems and flight test. This modification will apply to all motors except the two small dc motors in the film tension regulator servo.
5. Remount Shutter and Gyro Sensor Assemblies. To reduce the effect of optic elements of the steady state and transient vibrations generated by the gyro sensor, assembly and the shutter, these two units will be remounted so they will be supported by the superstructure rather than the optic structure. Five sub-assemblies; gyro sensor, shutter, programmer, power supply, and tension regulator, will be mounted to a framework suspended from the superstructure. The structure will be designed to be interchangeable with the present method of support to permit comparative evaluation of the two support methods.

6. Three-Axis Position Servo. A three-axis position servo (already designed and breadboarded) will be assembled to the configuration and tested. The position servo is designed to detect and correct for position error and to do so between shutter pulses. On the basis of breadboard tests conducted to date, this servo will be superior to the existing method of position reference in that it will eliminate the need for mechanically caging the configuration between frames, and, consequently, eliminate transient vibrations which may result from mechanical caging.
7. Isolation of Mechanically Transmitted Vehicle Vibrations. Results of the last series of flight tests showed that the use of an aircraft isolator significantly reduced mechanical vibrations transmitted from the aircraft to the configuration. It is anticipated that an improvement in the method of aircraft isolation can be made by placing isolators at the ends of the configuration main support tube rather than between main support tube and gimbal. By so doing, isolation will be at the two main configuration support points and will be more compatible with the stabilization system. The two methods of aircraft isolation will be evaluated and the better one utilized.
8. Stiffen Solenoid Mounts. Existing solenoid mounting brackets have been found to have sufficient compliance to introduce a time delay which makes the stabilization action of the torquer solenoids marginal. With the addition of the aircraft isolator and position servo, compliance of the existing solenoid mount brackets is too great. Accordingly, the solenoid mounts will be stiffened or otherwise modified to reduce solenoid mount compliance. This modification is closely associated with that of Item 7 (above), will be carried on in conjunction with Item 7, and may involve relocation of any or all of the three solenoids.
9. Cager Motor Cut-Off. In the present C Configuration design, the cager drive motor runs continuously during camera operation and is a source of mechanical excitation. Design concepts for a means of cutting out the cager drive motor at least during photographic operation will be developed. Selection of modification form and decision as to whether or not this modification will be incorporated will be determined at a later design conference.
10. Servo Circuit Changes. Minor circuit changes which will improve performance will be made in the Film Drive Servo and the Oblique Drive Servo.

11. Shutter Checkout. Two shutters for use in the configuration flight test will be partially overhauled, adjusted and thoroughly tested. This work will include installation of dynamically balanced motors and a check of the balance of the shutter disc.
12. Final Assembly and Systems Test. Engineering and shop services will be provided for the final assembly. PECO will have technical cognizance of, but Hycon will perform, the overall systems test of one completed C Configuration, except that, Hycon personnel will participate in but PECO will be responsible for the optical alignment and test phase of the overall systems test.
13. Flight Test Instrumentation. Engineering services and the necessary equipment will be provided for in-flight instrumentation of configuration vibration frequencies and amplitudes, configuration and equipment bay temperatures, and equipment bay pressure. The details of the instrumentation program for each flight will be determined during the course of the flight test program.
14. Engineering Services. In addition to the above specific work areas, engineering services will be provided for:
  - a. conferences at Hycon, PECO, Test Site and Wright Field,
  - b. engineering studies requested by PECO, or requested by Hycon and approved by PECO,
  - c. test site engineering support of the flight test program,
  - d. systems integration,
  - e. installation, alignment, and test of optics including participation in laboratory tests of optical quality and
  - f. evaluation of flight test photographic and instrumentation test results.

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Approved For Release 2002/08/07 : CIA-RDP81B00878R000100060025-3

Approved For Release 2002/08/07 : CIA-RDP81B00878R000100060025-3

Exhibit "D"

GOVERNMENT FURNISHED EQUIPMENT/PROPERTY

Encl #4  
DPS/693  
COPY 1 OF 1

The following items of government owned equipment or property will be required for modification and/or use by the Contractor during the performance of this contract. This equipment or property must be delivered to Contractor on or before 24 June 1958.

1. One (1) Configuration C, Serial #4, less optical structure and optics (already furnished)
2. ~~Two~~ (2) 300" Collimators with containers (one already furnished)
3. One (1) set Configuration C Optics and Optical Structure
4. One (1) Hand Control - Mark I to be compatible with 73-C Configuration.



Exhibit "E"

## TERMS AND CONDITIONS

Encl # 5  
DPS 1673  
COPY 1 OF 1

This proposal has been prepared on the basis that the following terms and conditions will be applicable to any subcontract or purchase order (hereinafter referred to as contract) resulting therefrom. (For convenience these terms and conditions are presented in four (4) parts.)

Part "A" - General terms and conditions to be included in any contract resulting from this proposal.

Part "B" - Special terms and conditions to be included in any contract resulting from this proposal.

Part "C" - Other conditions of the Hycon Mfg. Company proposal.

Part "D" - Other Information.

### Part "A" - General Terms and Conditions

This proposal has been prepared on the basis that the following general terms and conditions will be included in any contract resulting therefrom:

1. All the provisions of MCP 71-8 dated 15 November 1957, Para 9-4 of MCP 71-591 dated 23 December 1955, Para 9-9 of MCP 71-594 dated 4 January 1955, Para 9-13 of MCP 71-613 dated 9 April 1957, (copies of which are enclosed herewith) apply to this contract except as follows:

Paragraph 7 of MCP 71-8 entitled Records is to be deleted in its entirety and the following substituted therefor:

#### 7. Records

The Contractor agrees that the Contracting Officer or any of his duly authorized representatives shall, until the expiration of three years after final payment under this contract, have access to and the right to examine any directly pertinent books, documents, papers and records of the Contractor involving, transactions related to this contract, including subcontracts hereunder.

2. Paragraph 34 of MCP 71-8 entitled Renegotiation is to be deleted in its entirety and the following substituted therefor:

34. Renegotiation

This contract shall not be subject either to the provisions of the Vinson-Trammell Act as amended and extended (34 U. S. Code 496, and 10 U. S. Code 311) or to any other act of Congress, whether heretofore or hereafter enacted, providing for the renegotiation of Government contracts.

3. All references to "Contracting Officer" in clauses of MCP forms (paragraph 1 above) shall be interpreted to mean "Perkin-Elmer Corporation."

Part "B" - Special Terms and Conditions.

This proposal is contingent upon the inclusion of the following provisions in any contract resulting from this proposal:

1. Include the clause "Negotiated Overhead Rates" in accordance with ASPR 3.704.1.

2. Overhead Rates.

Pending establishment of final overhead rates in accordance with the clause hereof entitled Negotiated Overhead Rates, payment on account of all overhead will be made on the basis of billing rates approved by the Perkin-Elmer Corporation. The period as contemplated by paragraph (b) of said clause shall extend from 1 February 1958 to 31 January 1959.

3. It is understood and agreed that the Contractor, for the purpose of this contract only, is allowed the no-cost use on a non-interference basis, of the Government owned tooling and test equipment furnished on Purchase Order No. 56207 and Contract BC-200.

4. It is understood and agreed that the Contractor, for the purposes of this contract only, is allowed the no-cost use on a non-interference basis, of Government owned aircraft (including pilots, maintenance, fuel and oil), the use of a test site or sites, and the use of test site personnel being provided by the Contractor on another contract for the purpose of conducting flight tests necessary in the performance of this contract.

Exhibit "E"

Page 3

#### 5. Special Security Requirements

The Contractor shall not reveal (i) the specific nature or any details of the work being performed hereunder or (ii) any information whatsoever with respect to the department of the Government sponsoring this contract and the work thereunder except as the Contractor is directed or permitted to reveal such information by the Contracting Officer or by his duly authorized representative for security matters, and notwithstanding any clause or section of this contract to the contrary. The Contractor shall not interpret any clause or section of this contract as requiring or permitting divulgence of such information to any person, public or private, or to any officer or department of the Government without the express consent of the Contracting Officer or his duly authorized representative for security matters.

#### 6. Anticipatory Costs

All costs, which have been incurred by the Contractor, beginning 23 May 1958, in anticipation of this contract and prior to its signing, and which if incurred after signing would have been considered as allowable items of cost for this contract, shall be considered as allowable items of costs hereunder.

#### 7. Overtime Authorization

The Contractor is authorized to work on an overtime basis during the performance of this contract. Such overtime will be kept at a minimum consistent with the overall objectives of the program.

### Part "C" - Other Conditions of the Hycon Mfg. Company's Proposal

The following statements and conditions are submitted in order to clarify the Contractor's position and are not necessarily intended for incorporation in the contract.

1. The contractor does not allow any discounts for payments made within a stipulated period.
2. The delivery set forth in Exhibit "D" is based upon receipt of contractual authorization in the form of a fully executed contractual document not later than 15 July 1958.

Exhibit "F"

Page 4

3. The Hycon Mfg. Company employs in excess of five hundred (500) employees.
4. The contractor expects to subcontract to small business the maximum amount of work proposed herein that will be consistent with the efficient performance of any contract resulting therefrom.
5. It is contemplated that the amount of subcontracting will not exceed 10% of the total work proposed herein.
6. The Contractor will not require financial assistance if awarded the contract resulting from this proposal.
7. The Hycon Mfg. Company is incorporated under the laws of the state of Delaware.
8. The Contractor is a manufacturer of the article to be furnished hereunder.

Part "D" - Other Information

The Contractor hereby warrants that the prices quoted herein are not in excess of prices currently being charged to the purchasers of similar or identical articles.

Contractor represents that he will need no additional employees if awarded the contract contemplated hereby.